OPERATIONAL RISK MANAGEMENT

Whose Idea is This?

- **DODINST 6055.1 Occupational Safety & Health Program**
- **MCO 3500.27/OPNAVINST 3500.39**
- **ALMAR 210/97**
- **FM 100-14 Risk Management**

What is ORM ?

- **It is a decision making tool.**
- **Increases the ability to make informed decisions.**
- **Minimizes risk to acceptable levels, commensurate with *mission accomplishment*.**

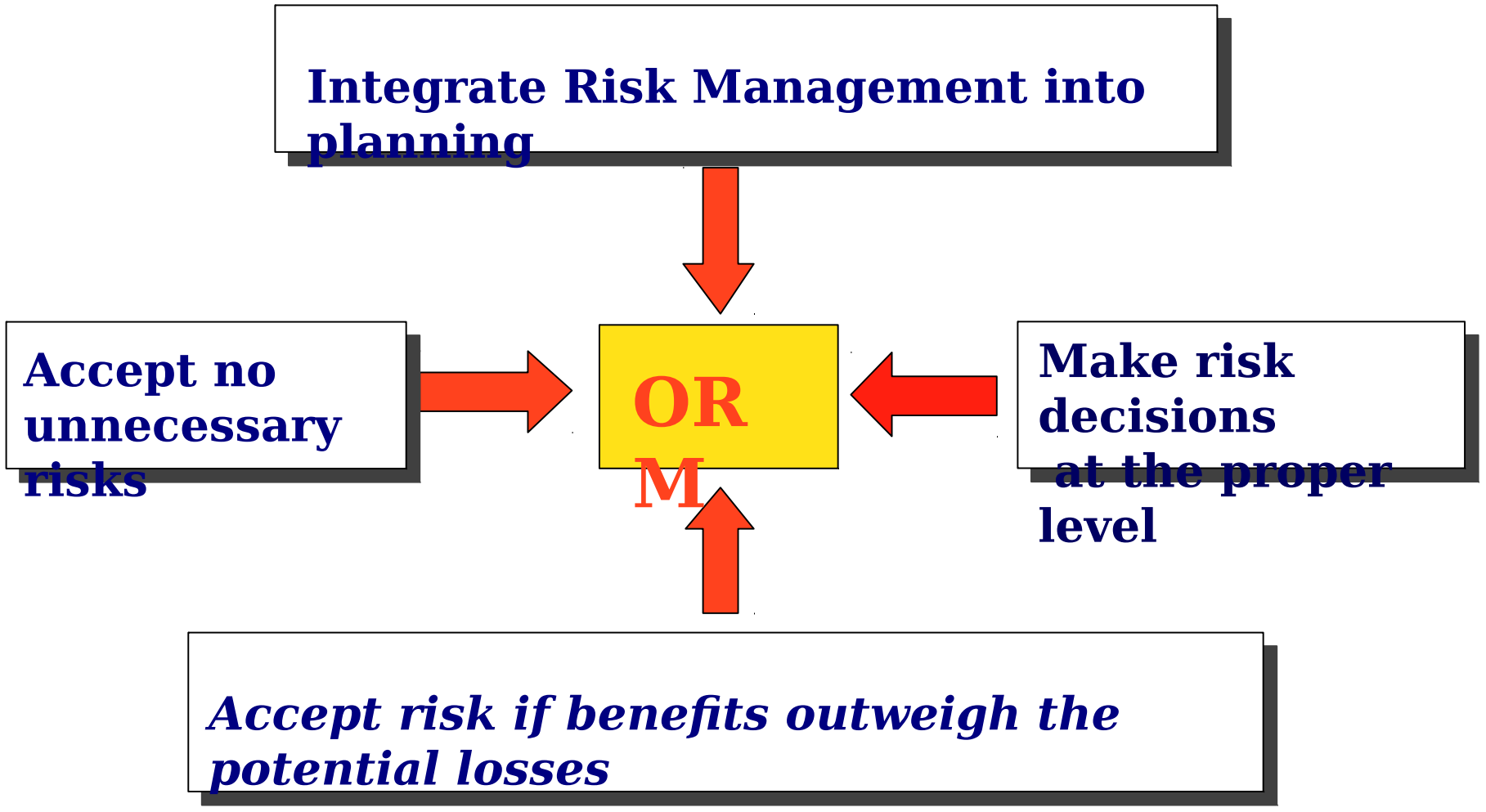
What is ORM ?

- **It is a thought process for identifying and controlling hazards to protect the force**
- **It is a continuous closed-loop process applicable to most operational and organizational situations and environments**
- **Follows a five step sequence, with four principles, & three levels of application**

GOAL of ORM

- **Optimize Operational Capability & Readiness by Managing Risk to Accomplish the Mission with Minimal Losses**

The Principles of ORM Based on MCDP-1 Warfighting


Integrate Risk Management into planning
Accept no unnecessary risks
OR M
Make risk decisions at the proper level
Accept risk if benefits outweigh the potential losses

Five Steps of ORM

- **Identify Hazards**
- **Assess Hazards**
- **Develop Controls & Make Risk Decisions**
- **Implement Controls**
- **Supervise**

ORM & BAMCIS

- **Identify Hazards = Begin Planning**

  Arrange Reconnaissance
- **Assess Hazards = Make Reconnaissance**
- **Develop Risk Controls and Make Decisions = Complete the Plan**
- **Implement Controls = Issue the Order**
- **Supervise = Supervise**

NOTICE: The Five Steps will parallel our Troop Leading Steps

1. Identify Hazards

- **Operational Analysis**
- **Preliminary Hazard Analysis**
  1. **List Hazards**
  2. **List Possible Causes of Hazards**

***Gather & analyze METT-T facts to identify hazards most likely to result in loss of combat power.**

***Consider all aspects of current and future situations, environment, and known historical problem areas.**

2. Assess the Hazards

- Prioritize Identified Hazards
  - Severity of Possible Loss
  - Probability of Possible Loss
- Tools
  - Risk Assessment Matrix
  - Comdr and Staff Risk Management Card
  - Automated Risk Assessment Control (ARAC) Computer Programs

*Complete risk assessment for each course of action (COA).

Risk Assessment Code

		MISH	PRO	ABILI	
		FREQUENT	LIKELY	OCCASION	UNLIKELY
		A	B	C	D
SE	Catastrophic I	1	1	2	3
VE	Critical II	1	2	3	4
RI	Marginal III	2	3	4	5
TY	Negligible IV	3	4	5	5
		RISK	ASSESSMENT		

Severity x Probability = Risk

★Severity

I - Catastrophic = Death or permanent total disability, system loss, major property damage.
II - Critical = Permanent partial disability, temporary total disability in excess of 3 months, major system damage, minor property damage.
III - Marginal = Minor injury, lost workday accident, compensable injury/illness, minor system damage, minor property damage.
IV - Negligible = First aid or minor supportive medical treatment, minor system repair.

Probability

A. Frequent - Marine/item occurs often in career/equipment service life. All Marines exposed continuously experienced.
B. Likely - Marine/item occurs several times in career/service life. All Marines exposed or occu frequently.
C. Occasional - Marine/item occurs sometime in career/equip service life. All Marines expose occurs sporadically or several times in inventory service life.
D. Unlikely - Marine/item can assume will not occur in career/equip service life. All Marines exposed or possible, but improbable; occurs very rarely.

Risk Assessment Code (RAC) and Risk Level

1. **EXTREMELY HIGH RISK: loss of ability to accomplish mission.**
2. **HIGH RISK: significantly degrades mission capabilities in terms of required mission standar**
3. **MEDIUM RISK: degrades mission capabilities in terms of required mission standards.**
4. **LOW RISK: little or no impact on accomplishment of mission.**
5. **RESIDUAL RISK: risk remaining after risk reduction efforts.**

3. Develop Controls and Make Risk Decisions

- **Consider Risk Control Options**
  - ***Most serious risks dealt with first**
  - ***Refer to preliminary hazard analysis causes**
- **Does Benefit Outweigh Risk?**

Communicate with Higher Authority if Required

***Identify, develop and select controls for hazards most likely to result in loss of combat power.**

***As control measures are developed, risks**

4. Implement Controls

- **Engineering Controls e.g. redesign, new materiel**
- **Administrative Controls e.g. SOPs, training,levels of approval**
- **Personal Protective Equipment e.g cranials, flak jackets**

***Coordinate and communicate controls. Integrate controls where required in Op, Frag, Overlay Orders.**

5. SUPERVISE

- **Enforce Controls**

- **Monitor Effectiveness of Controls**

Situational Changes will require continuous reevaluation

ORM Levels of Application

- **Time Critical - On the run consideration (FRAGO'S, Situational Changes, etc.)**
- **Deliberate - Application of the Complete Five Step Process (Marine Corps Planning Process)**
- **In Depth - Complete Five Step Process with Detailed Analysis (Acquisition, SSWG, etc.)**

Staff/Unit Implementation

- Use of time critical ORM during crisis action planning
- Use of deliberate ORM during exercise and operational planning
- Commander requires risk assessment and controls at decision briefs
- Commander's intent includes level of acceptable risk
- Working group application of ORM during draft/review of Force SOP's

Where Can ORM Be Used?

UNIT LEVEL

Rifle Co Live Fire Trng Plan

MT Co FEX Contact Tm response planning

HMLA (det) Night CQ Brief

STAFF LEVEL

MCB Live Fire Ranges Modification Plan

ACE CAX Fire and Assault Support Plan

MEU Embark Plan

Combine & Joint Ops

MWTC ORM

1. **Hike to Wolf Creek.**
   a. **Risk: Heat injury.**
   b. **Hazard Severity: I.**
   c. **Mishap Probability: C.**
   d. **RAC: 2.**
   e. **Risk control options.**
      (1) Reduce speed, increase stops.
      (2) Reduce weight.
      (3) Travel during the cool of the day.
      (4) Hydrate.
      (5) Train at altitude prior to movement up to the training area.
      (6) Emergency vehicle and corpsman in trace with communications to base camp

MWTC ORM

2. Flat skills training.
   a. Risk: Broken limbs.
   b. Hazard Severity: II.
   c. Mishap Probability: C.
   d. RAC: 3.
   e. Risk control options.
      (1) Adequate training before practical application.
      (2) Pair experienced with inexperienced skiers.
      (3) Low Red Hat to student ratio.
      (4) Have corpsman, emergency vehicle and communications on site.
      (5) Train on flat ground to control speed.
      (6) Snow conditions.
      (7) Train without packs initially.

A. Mission or Task:	B. Date/Time Group	C. Date Prepared:
Prepare defensive positions	**Begin:** 010035R May XX **End:** 010600R May XX	29 April XX

D. Prepared By: (Rank, Last Name, Duty Position) LT Jones, Plt Ldr

E. Task	F. Identify Hazards	G. Assess Hazards	H. Develop Controls	I. Determine Residual Risk	J. Implement Controls ("How To")
Construct nonstandard antivehicular wire obstacle	Back injuries and wire cuts during materiel offload	Moderate (M)	Use proper lift and carry methods and wear concertina wire gloves and safety goggles	Low (L)	Unit TACSOP, ARTEP 5-145 DRILL (pg 2-44) ARTEP 5-335-11-MTP
	Blunt trauma and cuts in pounding of U-shaped pickets	Moderate (M)	Wear helmet and increase situational awareness	Low (L)	Unit TACSOP, ARTEP 5-145 DRILL (pg 2-44) ARTEP 5-335-11-MTP
	Cuts when unrolling concertina	Moderate (M)	Wear concertina wire gloves and maintain situational awareness	Low (L)	Unit TACSOP, ARTEP 5-145 DRILL (pg 2-44) ARTEP 5-335-11-MTP
	Cuts when installing concertina	Moderate (M)	Wear concertina wire gloves and maintain situational awareness	Low (L)	Unit TACSOP, ARTEP 5-145 DRILL (pg 2-44) ARTEP 5-335-11-MTP
	Cuts when installing barbed wire	Moderate (M)	Wear concertina wire gloves and maintain situational awareness	Low (L)	Unit TACSOP, ARTEP 5-145 DRILL (pg 2-44) ARTEP 5-335-11-MTP

K. Determine overall mission/task risk level after controls are implemented (circle one)

(LOW (L)) MODERATE (M) HIGH (H) EXTREMELY HIGH (E)

Figure A-3. Example of Completed Risk Management Work Sheet for Squad/Platoon

Examples provided in Figures A-3 through A-6 should help individuals manage risk at the tactical level.

FM 100-14

Figure A-4. Example of Completed Risk Management Work Sheet for Company/Team

A. Mission or Task: Conduct a deliberate attack	B. Date/Time Group Begin: 010035R May XX End: 010600R May XX	C. Date Prepared: 29 April XX
D. Prepared By: (Rank, Last Name, Duty Position) CPT William Wallace, Cdr		

E. Task	F. Identify Hazards	G. Assess Hazards	H. Develop Controls	I. Determine Residual Risk	J. Implement Controls ("How To")
Conduct obstacle breaching operations	Obstacles	High (H)	Develop and use obstacle reduction plan	Low (L)	Unit TACSOP, OPORD, training handbook
	Inexperienced soldiers	High (H)	Additional instruction and increased supervision	Moderate (M)	Modified training schedule, additional instruction
	Operating under limited visibility	Moderate (M)	Use NVDs; use IR markers on vehicles	Low (L)	Unit TACSOP, OPORD
	Steep cliffs	High (H)	Rehearse use of climbing ropes	Moderate (M)	FM 90-6, *Mountain Operations* TC 90-6-1, *Mountaineering*
	Insufficient planning time	High (H)	Plan and prepare concurrently	Moderate (M)	OPORD, troop-leading procedures

K. Determine overall mission/task risk level after controls are implemented (circle one)

LOW (L) (MODERATE (M)) HIGH (H) EXTREMELY HIGH (E)

The Benefits of Risk Management

- **Protection of the Force**
- **Improved Mission Effectiveness**

SARA

SARA (Squadron Assistance / Risk Assessment) -

PC-based application that assists military aviation organizations in the management of unit activities.

Integrated capabilities across functional areas such as Scheduling, Training Management, Readiness Analysis, and Operational Risk Management

ORM is one available sub module

Why Do We Need ORM?

"You didn't give a ..... about my son Colonel. I gave him to you and you killed him with incompetence"

Grief Stricken Father